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The Cities of Zion? Mormon and non-Mormon town plans in the U.S. Mountain West, 1847–1930

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Abstract

This study explores the 'Mormon Culture Region' of the U.S. Mountain West by analyzing the town plans of Mormon and non-Mormon settlements in Utah, Idaho, and Wyoming. Distinctive Mormon settlement practices and town designs have long been recognized as both a central process in creating a distinctive cultural region, and a material hallmark of the region's enduring cultural geography. However, Mormon settlements exhibited considerable variation, changed over time, and competed with non-Mormon settlements as Mormon isolation gave way to American westward expansion. Yet most studies of the region's cultural geography have focused on a few early Mormon settlements, rather than using town plans as evidence for tracing the changing contours of settlement during eight decades of town-building. This study, based on original plats for 394 settlements across 45 counties, identifies eight prototypical plans representing Mormon and non-Mormon influence in the region. These plans show that Mormon planning was not uniform, but gradually standardized into two separate town designs as well as many variants. Non-Mormon settlements, in contrast, illustrate the influences of mining and railroad-building across a broader Western frontier. The distribution of these plans during three periods in the region's history reflects the extent of competing Mormon and non-Mormon settlement, as well as the eventual accommodation of Mormon and non-Mormon influences within a broader national frame. The shifting settlement practices recorded in the region's townscapes suggest several avenues for investigating the long-term evolution of Mormon settlements and the transformation of the 'Mormon Culture Region.'
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Historians and casual observers of the United States have noted the role of Mormon settlement practices in shaping a distinct geographical region. In contrast to many settlers in the U.S. Mountain West, Mormons constructed settlements and occupied land under the direction of the Church of Jesus Christ of Latter-day Saints.[1] Shared religious ideals guided communitarian settlement practices, spreading Mormon influence throughout Utah and into neighboring states. This zone of Mormon influence—dubbed a 'Mormon Culture Region' by Meinig—is recognizable in characteristic cultural landscapes.[2] Mormon cities and towns, marked by their urban layout and relationship with surrounding agricultural lands, are an important element of Mormon influence in the region.[3] But how uniform were these settlements? Recent studies have documented a series of changes in Mormon culture as an isolated Zion was incorporated into the American West, but less well studied are the interactions of Mormons and the many non-Mormons who came to the region at nearly the same time.[4] Did Mormon and non-Mormon towns and cities differ in characteristic

[1] I use the term "U.S. Mountain West" to refer to the region of the American West between the Rocky Mountains and the Sierra Nevada. The "Mormon Culture Region," concentrated in what is now the state of Utah, lies near the center of this region. Initial Mormon settlement took place at the intersection of the Great Basin and the Wasatch Mountains, though subsequent Mormon settlement extended into adjoining regions, including the Snake River Plain of Idaho, the Colorado Plateau of Southern Utah, and eventually into Arizona, Canada, and Mexico. Similarly, both the institution of the Church of Jesus Christ of Latter-Day Saints and its followers have long been colloquially referred to as "Mormons." While this term was originally derisive, it is now in widespread use both among the faith's adherents and in the general population. Similarly, non-Mormons were often called "Gentiles" by early Mormon leaders, and the term remains in sporadic use today.

[2] D. Meinig, The Mormon culture region: strategies and patterns in the geography of the American West, 1847–1964, *Annals of the Association of American Geographers* 55 no. 2 (1965) 191–219; W. Stegner, *Mormon Country*, New York, 1942.

[3] L. Bennion, Mormondom's desert homeland, in: R. Nostrand, L. Estaville (Eds), *Homelands: A Geography of Culture and Place across America*, Baltimore, 2001, 184–209.

[4] E. Yorgason, *Transformation of the Mormon Culture Region*, Urbana, 2003; P. Reeve, *Making Space on the Western Frontier: Mormons, Miners, and Southern Paiutes*, Urbana, 2006; J. Nichols, *Prostitution, Polygamy, and Power: Salt Lake City, 1847–1918*, Urbana, 2002; S. Smith, *The WASP in the Beehive: Non-Mormon presence in Territorial Utah, Masters'*

ways and were the Mormons as dominant in this region as Meinig argues? The landscapes of Mormon and non-Mormon towns often contrast sharply (Fig. 1), but can those differences be traced in recorded settlement plats, or generalized at the regional scale? A fine-grained analysis of town plats—the official maps recording Mormon and non-Mormon settlements—illustrates the outlines of the competing settlement patterns, as well as changes in these influences as the Mormon Culture Region was transformed and integrated into an expanding American West.

This article presents a geographical analysis of town plans in the 45 counties in Utah, Idaho, and Wyoming that form the historical core of the Mormon settlement region. Using the original plat maps for 394 cities, towns and villages, I document over 80 years of Mormon and non-Mormon town building. Analysis of these plats identifies eight prototypical town plans, each linked to particular periods and influences in the region's past. By tracing the presence and prevalence of these morphological models, I illustrate the persistence of Mormon influence, the effects of non-Mormon presence, and the subsequent convergence of Mormon and non-Mormon settlement forms.

Geographical studies of Mormon settlement have long hinged on Meinig's initial regional framing—indeed, few other areas could offer such a tidy example of a historical culture region. In contrast to the individualistic frontier migration and subsequent industrial consolidation that shaped much of the American West, Mormon settlement was clearly tied to the influence of centralized church leadership, which produced a communitarian homeland rooted in irrigated agriculture. Indeed, it is likely that Mormon colonization occupied many areas that might not have otherwise been settled at all. The contours of this settlement system changed over time: after initial Mormon proposals for an extensive 'State of Deseret' were rejected by the federal government, Mormons instead adopted a system of 'contiguous colonization' centered on Salt Lake City. By the completion of the transcontinental railroad in 1869, this Mormon realm confronted outside military, political, and economic influences, while Mormons and non-Mormons competed to settle peripheral areas in Utah and surrounding areas. Based on this history, Meinig proposed a three-part geographical structure for Mormon settlement: a *core* centered on Salt Lake City, a *domain* in which Mormons had settled without competition, and a *sphere*, where Mormons had settled, but had not attained cultural dominance (Fig. 2). But to what extent does this regional model hold true in detail, at the level of the hundreds of settlements established in the region?

Mormon settlement not only shaped the well-known evolution of a cultural region; it also molded local landscapes according to

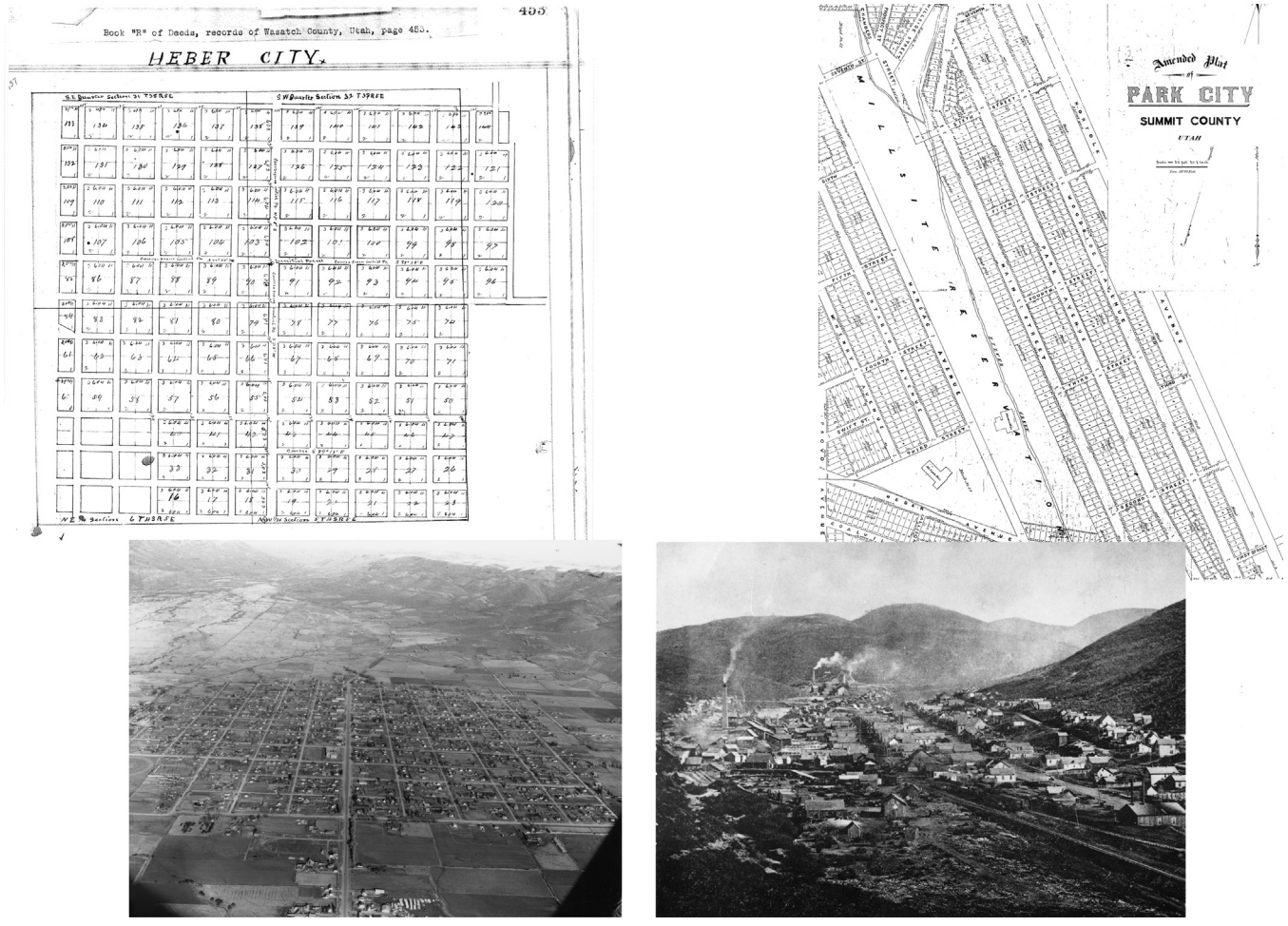

Fig. 1. Plats and photographs of Mormon Heber City (settled 1859; surveyed 1873) and non-Mormon Park City (platted 1884). Heber City's valley-bottom location, along with its regular grid of irrigation ditches, wide streets, and 1-acre (0.4 hectare) lots mark it as a Nauvoo-plan Mormon agricultural settlement. Similarly, the strict uniformity of lot and block sizes in Heber City reflects Mormons' egalitarian settlement practices. In contrast, Park City's location in a narrow canyon reveals its origins as a terrain-oriented mining town. Its densely packed grid of streets and lots, as well as its reservation of space for mill sites, indicate non-Mormon influences. Plats from Wasatch County Recorder, Summit County Recorder. Photographs used by permission, Utah State Historical Society, all rights reserved.

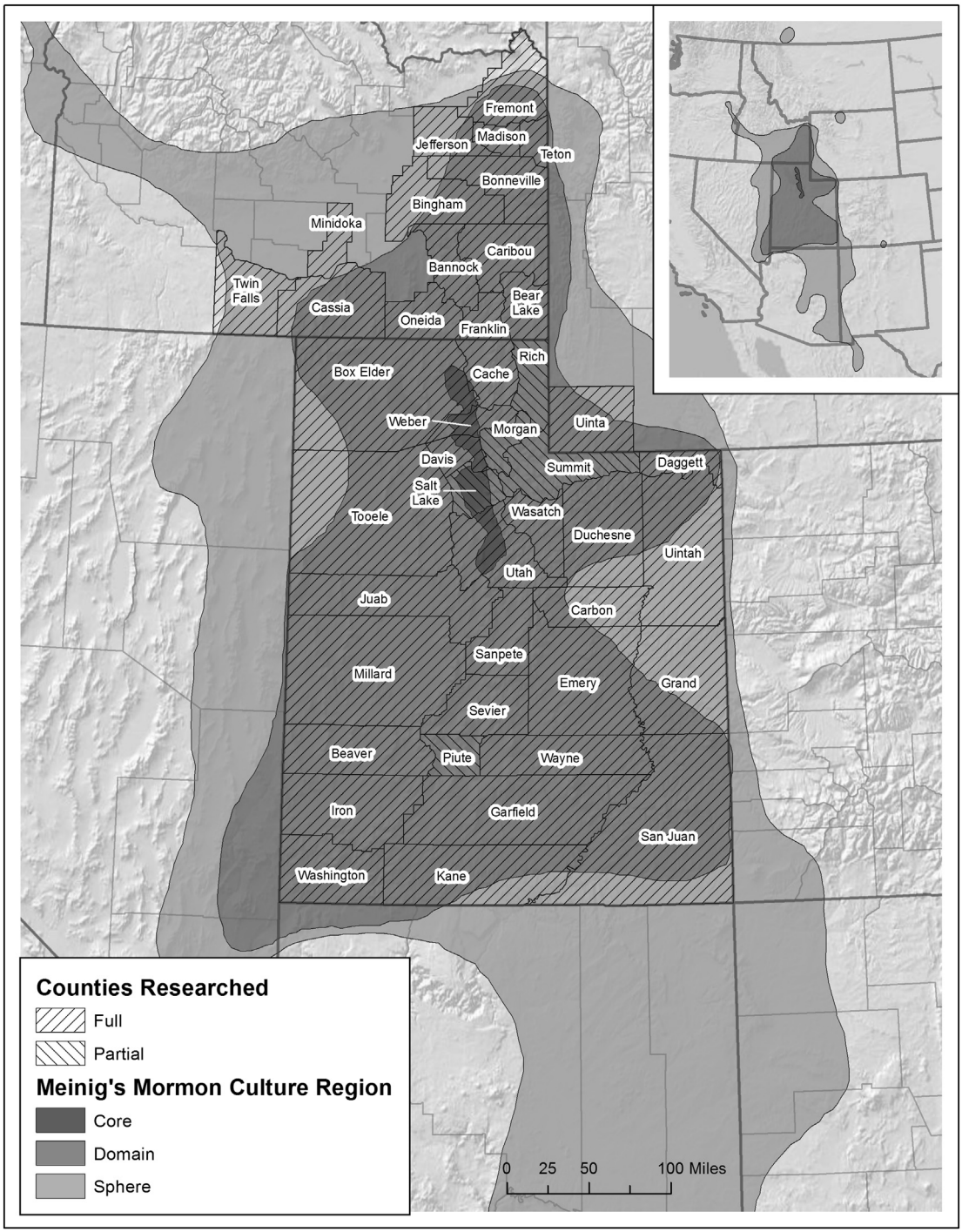

Fig. 2. Meinig's Mormon Culture Region, overlaid with the 45 counties included in this study. Research conducted in these counties traces the distribution of Mormon and non-Mormon town plans through the region's 'core' and 'domain,' and into its 'sphere.' Full plats for five counties in the region were inaccessible. Cartography by author, after D.W. Meinig, The Mormon culture region, pg. 202.

Mormon social norms.[5] Nowhere is this influence clearer than in the unique spatial forms and social underpinnings of Mormon towns. These 'Mormon Villages' not only facilitated the founding of new towns and community irrigation; they also concentrated farmers within nucleated settlements and organized the collective spiritual, social, and economic life of Mormon communities.[6] Yet regional dominance was also contested at the scale of individual settlements, as Mormons and non-Mormons founded new towns

[5] R. Francaviglia, *The Mormon Landscape: Existence, Creation, and Perception of a Unique Image in the American West*, New York, 1978; G. Peterson and L. Bennion, *Sanpete Scenes: A Guide to Utah's Heart*, 2nd ed., Eureka, UT, 2004; P. Starrs, Meetinghouses in the Mormon mind: ideology, architecture, and turbulent streams of an expanding church, *Geographical Review* 99 no. 3 (2009) 323–355.

[6] L. Nelson, *The Mormon Village: A Pattern and Technique of Land Settlement*, Salt Lake City, 1952; L. Arrington, *Great Basin Kingdom: An Economic History of the Latter-day Saints, 1830–1900*, reprint ed., Lincoln, 1968; D. May, Brigham Young and the bishops: the United Order in the city, in: D. Bitton, M. Beecher (Eds), *New Views of Mormon History*, Salt Lake City, 1987, 115–137; C. Galli, Building Zion: the Latter-day Saint legacy of urban planning, *BYU Studies* 44 no. 1 (2005) 111–136.

and reshaped existing communities.[7] The plans of these settlements, legally recorded in official plats thus offer a portal into the local-scale effects of regional contestation. Even after decades of urban change, the streets, blocks, lots, and public spaces of these settlements remain visible in the contemporary landscape, clear hallmarks of their founding cultures.

American cultures and urban forms

The townscapes of the Mountain West illustrate the influences of both Mormon expansion and subsequent regional contestation. Tracing this 'unwitting autobiography'—from the lasting influences of first effective settlement through the changes brought by subsequent occupation—has long been a central concern of North American historical geography.[8] Material forms in the landscape—such as vernacular architecture, town plans and graves—illustrate the diffusion and interaction of social, cultural and religious groups. Town and city layouts are an especially rich record of these influences. M.R.G. Conzen identifies three elements that can help to analyze the complexities of urban morphology: the characteristic layouts of streets and land plots in a *town plan*, the *building fabric* constructed in those spaces, and the patterns of *land utilization* in the city.[9] Of these, Conzen identifies town plans as the most enduring—and thus diagnostic—components of historic towns. Alongside Conzen's analytical approach, town-plan studies have made important contributions to understanding American cultural geography.[10] Following foundational studies exploring the functions and forms of towns in America, key works have identified specific urban forms as distinctive hallmarks of specific regions and cultures, including Pennsylvania market towns, Texas county seats, and Great Plains railroad towns.[11] Additional work has addressed the variation of individual town layouts and structures from these regional models, showing changing influences on regions over time.[12] However, inferring cultural contacts and diffusion through town plans is not a simple process. Town plans were the work of a wide variety of government officials, entrepreneurial settlers, local and national business interests, and itinerant surveyors. Many town plan elements were widely repeated in disparate locales, so that finding a particular element repeated across multiple towns does not necessarily imply a definite historical or cultural link between them. Nonetheless, by comparing elements across a large number of town plans, this research has done much to illustrate the processes of cultural diffusion and dominance in American urban spaces and across the broader American scene.[13]

Despite the challenges of distilling cultural processes from the physical landscape, town plans offer an important resource for re-reading the Mormon Culture Region. Mormon town plans were a key component of the communitarian Mormon settlement strategy, helping to convert early Mormon influence into lasting regional dominance. If Mormon settlements were not strictly identical, they were nonetheless easily recognizable, marking Mormons as a separate people and catalyzing the growth and success of Mormon settlements.[14] By the twentieth century, a series of cultural and economic adaptations—most notably the abandonment of polygamy—placed the Mormon settlement complex within the spatial bounds and social norms of postbellum America.[15] Yet even as church leaders relinquished direct control over settlement-building, they continued to encourage Mormons to settle in cohesive communities.[16] Town-building continued into the 1920s in many areas, drawing on and combining both Mormon and non-Mormon influences. Although the distinctiveness of Mormon regional landscapes is well-acknowledged, questions remain as to how Mormon and non-Mormon influences affected town forms across the historical scope of regional settlement.

Although Meinig considered the influence of non-Mormons in his regional geography of Mormon settlement, most studies of Mormon town planning have emphasized the origins of the Mormon planning tradition. Mormon plans were distinctive but not wholly new. They arranged many features common in American town planning in characteristically Mormon ways.[17] Joseph Smith's 1834 'City of Zion' plat, the first statement of a distinctly Mormon planning tradition, contains many of the distinctive features of Mormon town plans: it is not only structured around a grid system, but prescribes 132-foot wide streets, divisions of lots into uniform blocks, central blocks reserved for religious and public use, and the inclusion of farmers' homes within the space of the city.[18] This plat

[7] L. Rosenvall, *Mormon Settlement Patterns, 1830–1900, Ph.D. diss.*, Berkeley, 1972; D. Hodson, *The Origin of Non-Mormon Settlements in Utah, 1847–1896, Ph.D. Diss.*, 1971; Smith, *The WASP in the Beehive* (note 4).

[8] P. Lewis, Axioms for reading the landscape, in: D. Meinig (Ed), The *Interpretation of Ordinary Landscapes: Geographical Essays*, New York, 1979, 12; D. Meinig, American wests: preface to a geographical interpretation, *Annals of the Association of American Geographers* 62 no. 2 (1972) 159–184; D. Meinig, *Transcontinental America, 1850–1915*, New Haven, 1998; W. Zelinsky, *The Cultural Geography of the United States*, rev. ed. Englewood Cliffs, NJ, 1992.

[9] M.R.G. Conzen, *Alnwick, Northumberland: A Study in Town-Plan Analysis,* Institute of British Geographers Pub. 27, London, 1969.

[10] M.P. Conzen, The study of urban form in the United States, *Urban Morphology* 5 no. 1 (2001) 3–14.

[11] D. Stanislawski, The origin and spread of the grid-pattern town, *Geographical Review* 36 no. 1 (1946) 105–120; J. Vance, *The Merchant's World: The Geography of Wholesaling*, Englewood Cliffs, N.J.1970; J. Vance, *The Continuing City: Urban Morphology in Western Civilization*, Baltimore, 1990; *R.* Pillsbury, The urban street pattern as a culture indicator: Pennsylvania, 1682–1815, *Annals of the Association of American Geographers* 60 no. 3 (1970) 428–446; W. Zelinsky, The Pennsylvania town: an overdue geographical account, *Geographical Review* 67 no. 2 (1977) 127–147; T. Jordan, "The imprint of the upper and lower South on mid-Nineteenth-Century Texas, *Annals of the Association of American Geographers* 57 no. 4 (1967) 667–690; J. Hudson, *Plains Country Towns*, Minneapolis, 1985; J. Reps, *Cities of the American West: A History of Frontier Urban Planning*, Princeton, 1979; J. Reps, *The Forgotten Frontier: Urban Planning in the American West before 1890*, Columbia, 1981.

[12] R. Veselka, *The Courthouse Square in Texas*, in: Kenneth E. Foote (Ed), Austin, 2000; M.P. Conzen, The non-Pennsylvania town: diffusion of urban plan forms in the American West, *Geographical Review* 96 no. 2 (2006) 183–211; T. Schmiedeler, Transitions in the forms of Midwestern county seats on the American frontier, *Urban Morphology* 11 no. 2 (2007) 126–141.

[13] Zelinsky, *The Cultural Geography of the United States* (note 8); M.P. Conzen, Afterword to *The Making of the American Landscape*, New York, 1990, 370–375.

[14] F. Fox, *The Mormon Land System: A Study of Settlement and Utilization of Land under the Direction of the Mormon Church, Ph.D. diss.*, 1932; J. Ricks, *Forms and Methods of Early Mormon Settlement in Utah and the Surrounding Region, 1844–1877*, Logan, 1967; Arrington, *Great Basin Kingdom* (note 6).

[15] Yorgason, *Transformation of the Mormon Culture Region* (note 4), Urbana, 2003.

[16] Meinig, The Mormon culture region (note 2); Hodson, *The Origin of Non-Mormon Settlements in Utah* (note 7); L. Bennion, Mormon country a century ago: a geographer's view, in: T. Alexander (Ed), *The Mormon People: Their Character and Traditions*, Provo, 1980, 1–26. The decreasing involvement of the Mormon hierarchy in new settlements is discussed in Fox, *The Mormon Land System* (note 14), 93–94; Rosenvall, *Mormon Settlement Patterns* (note 7); L. Rosenvall, Expansion outside the Wasatch Front, in: S. Brown, D. Cannon, R. Jackson (Eds), *Historical Atlas of Mormonism*, New York, 1994, 96–97.

[17] Reps, *Cities of the American West* (note 11); Reps, *The Forgotten Frontier* (note 11).

[18] H. Smith, City planning, *Journal of History* [Lamoni, IA] 15 no. 1 (1922) 1–17; J. Baum, *Geographical Characteristics of Early Mormon Settlements, Masters' Thesis*, 1967; W. Wahlquist, *Settlement Processes in the Mormon Core Area, 1847–1890, Ph.D. diss.*, 1974; C. Parera, Mormon town planning: physical and social relevance, *Journal of Planning History* 4 no. 2 (2005) 155–174.

has received extensive attention, but it was never constructed as designed and early Mormon settlements diverged from its initial model.[19] These variations persisted in the plans of Mormon settlements in Utah, but have been investigated only sporadically. Studies of Mormon town planning have emphasized individual towns and regions—especially Salt Lake City—rather than pursuing a broad comparison of Mormon settlement forms.[20]

Some progress has been made toward a more systematic approach to Mormon town planning, corresponding to the regional-scale morphological studies noted above. An initial study by Baum compared 100 Utah towns, but his research area was limited, and his analysis highlighted towns' physical locations over their formal layouts. Nonetheless, Baum was among the first to suggest that Mormon settlements did not simply replicate Smith's City of Zion plat.[21] Rosenvall considered town plans as part of his 1972 compilation of a catalog of all Mormon church-directed settlements, but his analysis effectively ended with Utah's 1896 statehood.[22] Jackson and Layton likewise demonstrated that Mormon towns were not direct copies of the City of Zion, but did not subsequently explore or address this variation.[23] Since the 1970s, little additional work has addressed this issue. Ellis broke new ground in identifying two distinct prototypes for Mormon towns, but his study considered only a handful of settlements.[24] While the literature has extensively considered Mormon settlement as a geographical phenomenon, the region's town plans have not been reconsidered in light of recent work on the later Mormon settlements, the presence of non-Mormons, or changes in Mormon culture. It is thus useful and appropriate to examine the range and variation in the region's towns more closely, in hopes of tracing the local effects of regional transformation.

Assembling the evidence

In contrast to earlier work, this study provides an extensive analysis of the historical variation of town plans in the Mormon Culture Region in line with M.P. Conzen's study of towns in Oregon's Willamette Valley.[25] Conzen's approach analyzes town plats from all available town plats within a given region. These plats—the formal legal instruments recording the surveys of townsites into streets, blocks, and lots, officially recorded in county archives—document each town's layout, as conceived at the time of its initial survey. Although original plats do not record subsequent additions, subdivisions, or resurveys to townsites, they provide clear documentation, allowing comparison between settlements founded at different times, in different areas, and in different cultural contexts.

This approach provides a more comprehensive analysis of the changing influences on town-building across the Mormon Culture Region than any previous study—it includes both Mormon and non-Mormon plans, and considers the plats of both successful and failed settlements. On the other hand, original plats document only the initial forms of formal settlements. A great deal of Mormon settlement took place in individual dispersed farmsteads; likewise, only the most successful and long-lasting of mining camps were ever formally platted.[26] Nonetheless, these initial layouts provide enduring clues to the original cultural contexts of most of the region's towns. Town-plan analysis does not provide a complete accounting of the historical relationship between Mormon and non-Mormon cultures and the region's built environment, but it provides a rich source of documented evidence for a crucial element of that relationship.

Within this broad approach, several steps helped to reduce the study to a manageable level of complexity. First, only the initial survey of each townsite was considered—subsequent resurveys and extensions, while noted in a few significant sites, were not systematically analyzed. Second, only towns surveyed between 1847 and 1930 were included in the study. This reflects the changing character of regional settlement by the mid-twentieth century—although new towns were established after 1930, they were generally the result of metropolitan development, rather than new independent settlement. Moreover, these later towns generally adopted plans reflecting national homogenization rather than regional cultural influences. Finally, forty-five of the eighty-seven counties within the Mormon culture region were selected for extensive analysis (Fig. 2). These counties highlight the areas Meinig identified as most extensively influenced by Mormon settlement—they include all five counties in Meinig's 'core,' and thirty-six of the thirty-eight counties in his 'domain,' but only four out of forty-four 'sphere' counties. The study area excludes much of the Mormon Culture Region's far-flung periphery in Alberta, Arizona, Sonora, and Chihuahua, but it illustrates early and late Mormon settlements, as well as non-Mormon presence along railroads and in mining districts. In addition, these forty-five counties include areas of South-Central Idaho and Eastern Utah's Uinta Basin that were settled in the early Twentieth Century. These counties provide a remarkably strong cross-section of the cultural and geographical influences that both established and transformed the Mormon heartland.

Over a five-year period (2004–2009), I visited the county seats of each county in the study area, in order to review all available townsite plats in each county's archives. As part of this review, I noted the date of each plat's recording, as well as its characteristic features. Where possible, I also photocopied or photographed each plat to allow further study and review. For most of the study area, this yielded a comprehensive record of town-building activity. In five counties (marked on Fig. 2), early records were missing, inaccessible, or had been moved to off-site storage. For these counties, it was necessary to compile plat data from secondary histories, public abstracts of title, and aerial photographs.[27] Four of these five counties remain rural, and it was possible to reconstruct survey dates and layouts for all recorded settlements within them. In metropolitan Salt Lake County (where the process of Mormon

[19] C. Hamilton, *Nineteenth-Century Mormon Architecture and City Planning*, New York, 1995.

[20] C. Harris, *Salt Lake City: A Regional Capital, Ph.D. diss.*, 1940; C. Chestnutwood, *A Historical Approach to the Urban Geography of Brigham City, Utah, Masters' Thesis*, 1950; E. Bjorklund, *Changing Occupance in Davis County, Utah, Masters' Thesis*, 1951; J. Spencer, *The Middle Virgin River Valley, Utah: A Study in Cultural Growth and Change, Ph.D. diss.*, Berkeley, 1937; C. Peterson, *Settlement on the Little Colorado, 1873–1900: A Study of the Institutions and Practices of Mormon Colonization, Ph.D. diss.*, 1967; S. Schuster, *The Evolution of Mormon City Planning and Salt Lake City, Utah, 1833–1877, Masters' Thesis*, 1967; M. Bradley, Colliding interests: mapping Salt Lake City's west side, *Journal of Urban History* 31 no. 1 (2004) 47–74; Parera, Mormon town planning (note 18).

[21] Baum, *Geographical Characteristics of Early Mormon Settlements* (note 18); Wahlquist, *Settlement Processes in the Mormon Core Area* (note 18), 24–25.

[22] Rosenvall, *Mormon Settlement Patterns* (note 7).

[23] R. Jackson and R. Layton, The Mormon village: analysis of a settlement type, *The Professional Geographer* 28 no. 2 (1976) 136–141.

[24] G. Ellis, *The Historic Mormon Village Landscape, Masters' Thesis*, 1996.

[25] Conzen, The non-Pennsylvania town (note 12).

[26] Bennion, Mormondom's desert homeland (note 3); C. Peterson, The imprint of agricultural systems on the Utah landscape, in: R. Jackson (Ed), *The Mormon Role in the Settlement of the West,* Provo, 1978, 91–106.

[27] Rosenvall, *Mormon Settlement Patterns* (note 7); S. Carr, *Utah Ghost Towns*, 3rd ed., Salt Lake City, 1986; J. Van Cott, *Utah Place Names*, Salt Lake City, 1990.

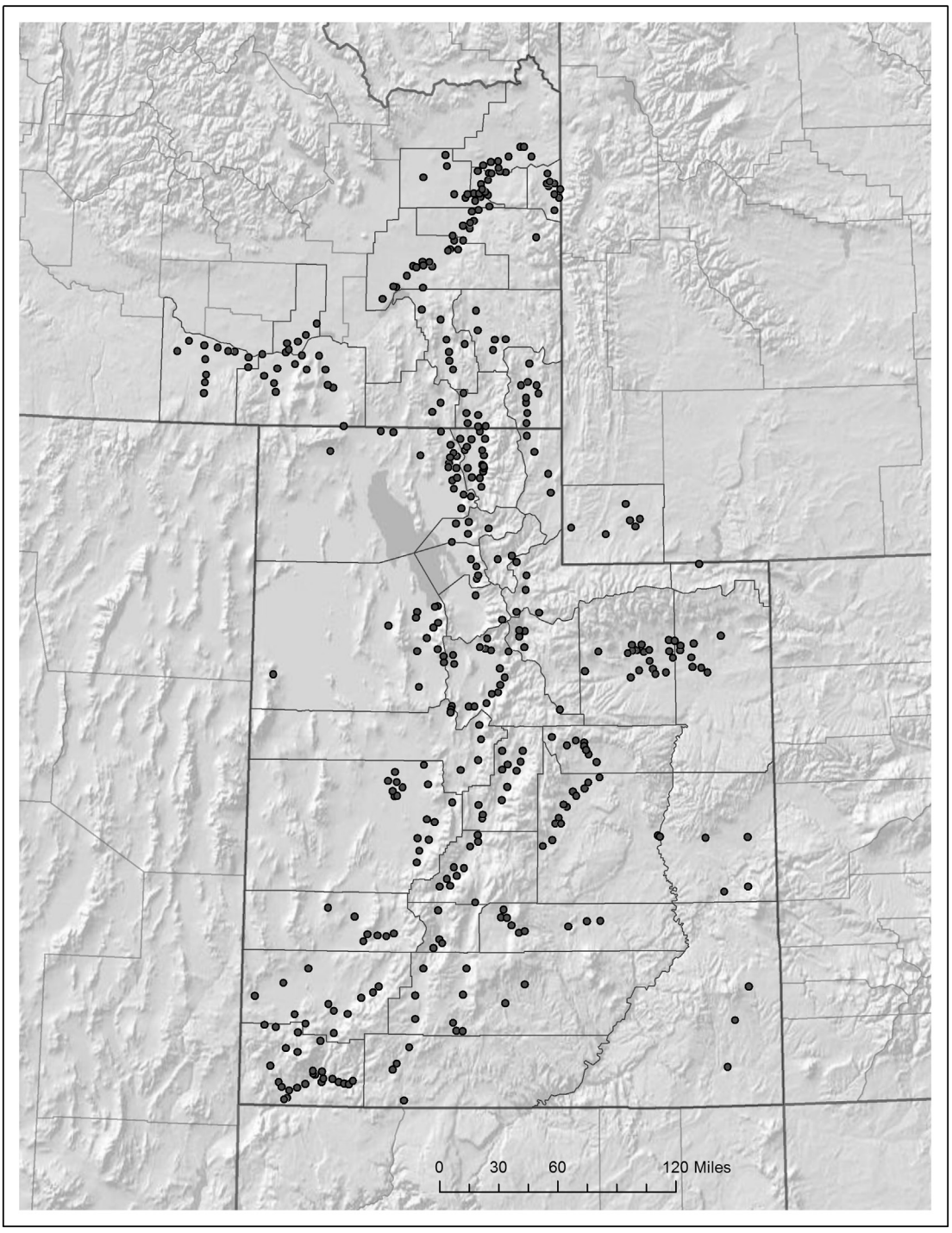

Fig. 3. Location of 394 platted cities and towns in the study area. Although the study area spans a large area, most towns are located in areas of concentrated settlement along valleys, rivers, and railroad lines. Cartography by author.

settlement diverged significantly from other areas, as discussed below), it was far more difficult to distinguish historic clusters of dispersed settlement from pioneer plats, or late-period industrial towns from metropolitan outgrowths. The resulting collection of 394 town plats thus likely excludes a handful of settlements in Utah's most populous county; nonetheless, it represents nearly all of the platted townsites elsewhere in the study region (Fig. 3).

After the archival plats were compiled, it was necessary to date the initial survey and settlement of each townsite. As M.P. Conzen notes, 'common assumptions about when a town began have often varied widely and led to confusion.'[28] In many cases, years or even decades passed between the initial survey of a townsite and the subsequent recording (or re-recording) of its plat. To clarify this process, Conzen proposes a model of town formation for Oregon's

[28] Conzen, The non-Pennsylvania town (note 12), 188.

Table 1
Settlement formation of Utah and Idaho compared to the model proposed by M.P. Conzen for Oregon's Willamette Valley. Mormon settlement was not as clear-cut and sometimes involved years of uncertain land tenure and multiple land surveys. Recorded documents do not always reflect town plans as they existed at the time of initial settlement, requiring research in secondary literature.

Stages of Settlement Formation in the Willamette Valley (After M.P. Conzen, 2006, 190)	Altered Model of Early Mormon Settlement (c. 1847–1875)	Altered Model of Late Mormon Settlement (c. 1869–1930)
1. Cession of Native American Land Title.	Official religious "call" to settle area.	
2. Land claims by first white settlers.	Initial occupation of area.	Initial dispersed occupation of area, under preemption or homestead title.
	Organization of Mormon ecclesiastical structure for area.	Organization of Mormon ecclesiastical structure for area.
	Calls to coalesce dispersed settlements or "fort up" against Native American hostilities.	Possible informal structuring of settlement among Mormon settlers.
		Granting of federal title under Homestead Act, Preemption Act, etc.
3. Townsite surveyed and laid out by proprietor.	Survey of townsite under religious authority and local title. Allocation or sale of lots.	Official survey of townsite by one or more homesteaders.
4. Town plat dedication filed by proprietor.	Recording of townsite survey under territorial laws.	Town plat dedication filed by proprietor.
	Potential abandonment and resettlement of townsite.	
	Potential growth or alteration of initial town plan.	
5. Official recording of town plat.	Resurvey of town as part of claim to town land title.	Official recording of town plat.
	Filing of claim for federal title for town lands.	
	Allocation of town lots by town mayor or county probate judge.	
6. Potential resurvey of townsite to correct errors.	Potential resurvey of townsite to correct errors.	Potential resurvey of townsite to correct errors.
7. Potential resurvey of townsite to replace lost records.	Potential resurvey of townsite to replace lost records.	Potential resurvey of townsite to replace lost records.
8. Incorporation of town or city.	Incorporation of town or city.	Incorporation of town or city.

Willamette Valley, which helps to clarify the established practices of settlement formation and legal documentation in westering America. This model includes eight distinct types of events (listed in the first column of Table 1) which can be identified as towns' founding dates. Although non-Mormon settlements in Utah generally followed Conzen's model, early Mormon settlements faced difficulties in establishing legal land tenure through much of the nineteenth century. Although all of Utah's lands initially lay in the public domain, a federal land office for Utah Territory was only established in 1869—over two decades after the first Mormon towns had been established. Early Mormon towns were thus initially settled and surveyed under religious authority or territorial law, with federal land title secured much later.[29] This religious model of town-building—in which uniform lots were distributed to community members, rather than sold—marks one of the greatest divergences between early Mormon settlement practices and those of non-Mormon (and, eventually, later Mormon) settlements. But because of the divergence between religious and civil authority, the date of a town's establishment is not always clear from its recorded survey. For a few towns, original pioneer plats are available, while most recorded documents reflect later resurveys conducted as part of federal land claims. The abandonment and subsequent resettlement of several Mormon settlements further complicates the historical record. Columns 2 and 3 of Table 1 thus extend Conzen's model to early and late Mormon settlement processes, allowing the dates recorded on official documents to be reconciled with those cited in secondary literature.[30] In many cases, only approximate dates of original town platting could be established. Fortunately, such approximations proved sufficient to understand the spatial variation of the region's town plans across its broad geographical and historical contours.

Mormon and non-Mormon urban forms

The 394 settlements recorded in these plats exhibit considerable variation in the size, shape, and orientation of their blocks and lots, the structure and width of streets, the presence or absence of alleys, and the location of reserved public spaces. Unfortunately, as M.P. Conzen notes, 'exceedingly few records describe any of the reasons behind particular elements in town plans.'[31] A full typology and analysis of all these elements, would present a dizzying array of morphological permutations. Instead, following the approach used by Schmeideler and Veselka, this study connects morphological variation to Mormon and non-Mormon influences through eight prototypical town layouts (Fig. 4).[32] These layouts form the basis of a simple yet potent typology, which highlights the historical and social influences on town-building in the study area. In addition to the purely morphological features of the studied towns, this typology is also guided by the distinction between towns initially founded by Mormons—whether as part of the overall project of church-directed settlement, or as individuals—and those founded by non-Mormons. Connecting this documented historical distinction with the spatial forms of the region's towns, highlights the impacts of regional transformation on urban spaces at the local scale.

Four of the eight town types are recognizably associated with Mormon settlement in the study area. A number of morphological elements, including a grid of wide streets and square blocks uniformly divided into large lots, make Mormon towns easily recognizable throughout the Mountain West.[33] Even so, many other elements—such as religious buildings, and a distinctive system of street numbering—are explicitly identified on only a handful of

[29] Utah Division of Archives and Records Services, Original land titles in Utah Territory, http://archives.utah.gov/research/guides/land-original-title.htm (accessed 6 January, 2015).
[30] Rosenvall's, *Mormon Settlement Patterns* (note 7) contains a (sadly unpublished) catalog of all Mormon settlements and the dates of their establishment, which proved an invaluable resource for this task.
[31] Conzen, The non-Pennsylvania town (note 12), 188.
[32] Schmiedeler, Transitions in the forms of Midwestern county seats (note 12); Veselka, *The Courthouse Square in Texas* (note 12).
[33] Francaviglia, *The Mormon Landscape* (note 5).

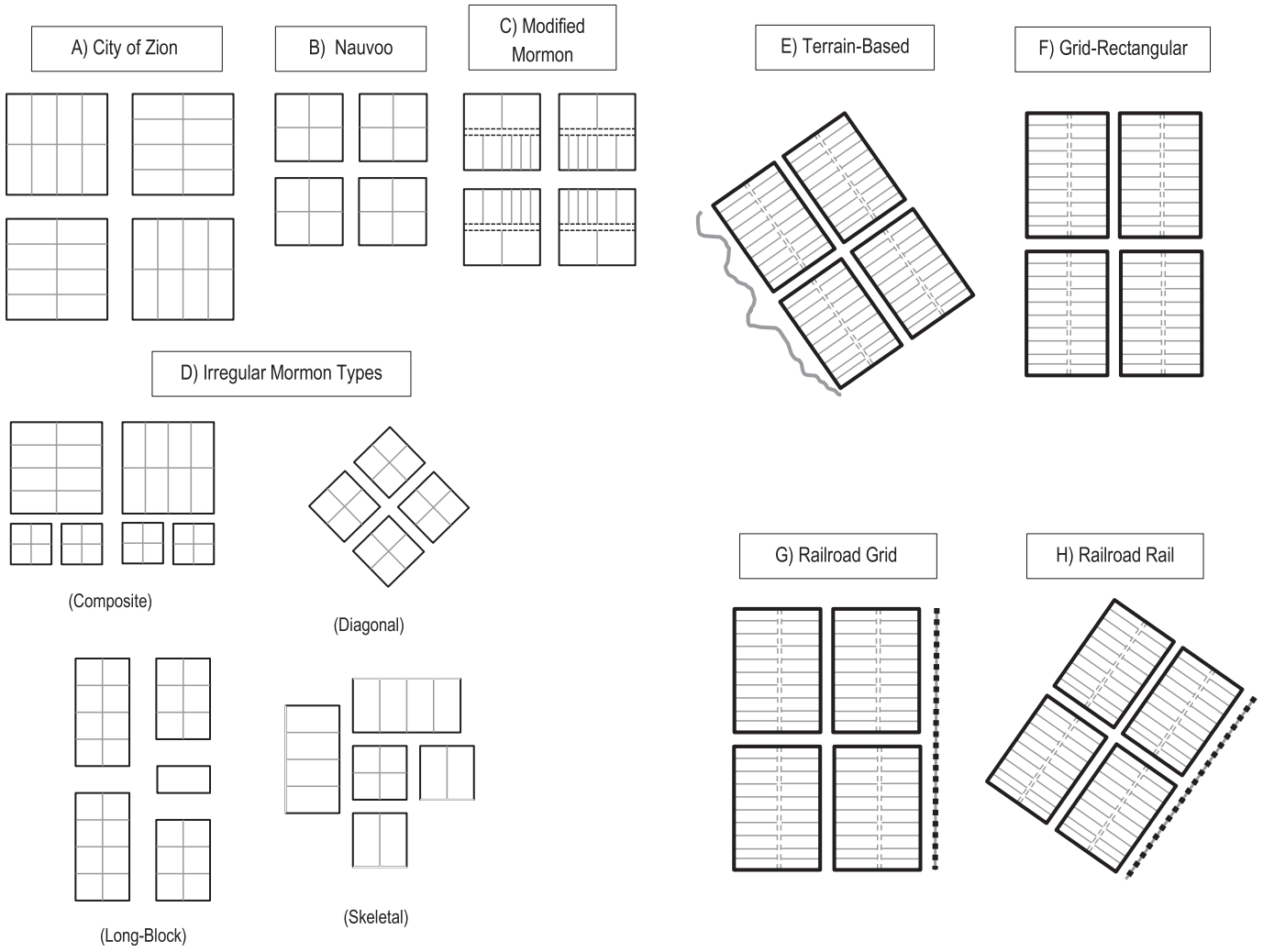

Fig. 4. Eight prototypical town plans encompass most of the variation in the study area. Plans A–D reflect Mormon influence, while plans E–H are standard non-Mormon models transplanted to the U.S. Mountain West. Cartography by author.

Mormon plat maps. Most Mormon towns follow two distinct morphological models first identified by Ellis.[34] Each has antecedents in Mormonism's Midwestern origins. The first, the *City of Zion* model, is characterized by large square blocks, generally divided into eight lots each. Ten-acre (4.0 hectare) blocks are most common, although a few variant settlements have six-, eight-, or twelve-acre (2.5–4.8 hectare) blocks, or six or ten lots per block. In the contrasting *Nauvoo* model, smaller four- or five-acre (1.6–2.0 hectare) blocks are divided into four lots each. Both the Zion and Nauvoo models are based on lots of one to one-and-a-half acres (0.4–0.6 hectares), though the two models produce clearly distinct plats and urban landscapes. Yet two additional categories of Mormon plans are not addressed in previous studies. The *Mormon Irregular* plans encompass four types of deviation from the orthodox Mormon grid: long rectangular blocks, diagonally oriented street grids, skeletal towns with only a few complete blocks, and composite plats containing multiple Mormon block types. Finally, *Modified Mormon* settlements incorporate alleys, varying lot sizes, and other typically non-Mormon plan elements within recognizably Mormon grid patterns. Although these latter two types occurred less frequently than the standard Mormon models, most irregular plans were surveyed in the first decades of Mormon settlement, while modified Mormon plans are almost entirely products of the twentieth century.

Although M.P. Conzen notes that 'outside the Hispanic rim and the Mormon realm,' town plans in the American West are often seen as 'a repetitive and rather uninteresting pattern of seemingly simple grid layouts owing their forms largely to the railroad,' the non-Mormon settlements in the study area exhibit considerably more morphological variation than their Mormon competitors.[35] In contrast to the centrally-directed Mormon project, the layouts of these towns were guided by their proprietors' individual preferences and hope of speculative profits.[36] Following regional and national trends, these entrepreneurs planned close-packed business districts, alleyways, and reserved public spaces, balancing the area devoted to saleable lots with the provision of access and amenities in hopes of maximized revenues. These features have been analyzed extensively at a national scale, but this study

[34] Ellis, *The Historic Mormon Village Landscape* (note 24).
[35] Conzen, The non-Pennsylvania town (note 12), 186.
[36] Vance, *The Merchant's World* (note 11); Vance, *The Continuing City* (note 11).

Table 2
The eight plan prototypes divided across three periods for the U.S. Mountain West. Mormon dominance is evident in the initial pioneer period, though non-Mormon town types become more numerous by the twentieth century. Within each group's towns, the relative prominence of different plans suggests internal developments and external influences.

Plan type	1847–1869	1870–1896	1897–1930	*Total*
City of Zion	41	16	7	*64*
Nauvoo	44	43	46	*133*
Irregular	31	6	2	*39*
Modified	4	1	22	*27*
All Mormon Types	*120*	*66*	*77*	*263*
Terrain	2	9	4	*15*
Grid Rectangular	0	7	31	*38*
Railroad-Rail	1	9	13	*23*
Railroad-Grid	0	7	46	*53*
All Non-Mormon Types	*3*	*32*	*94*	*129*

highlights four distinct categories based on the 'fixation features' used by M.P. Conzen as the first level of his analysis.[37] *Terrain-based* towns, most frequently associated with mining activity, are oriented to watercourses, canyons, and other features of the physical landscape. *Grid-Rectangular* towns aligned their street grids to those of the U.S. Public Land Survey System. Railroads, in contrast, produced two types of town layout: *Railroad-Rail* towns had street grids oriented to railroad alignments, while *Railroad-Grid* towns were located on railroad lines, but had streets oriented to the federal survey grid. This four-part division drastically simplifies much of the complexity of the region's non-Mormon settlements, but it connects many of the influences that brought non-Mormon settlement to the Mountain West to the still-distinct landscapes of the towns non-Mormons built.

Table 2 shows the distribution of these eight town types across the eighty-three years of town-building documented in this study. This distribution compares three periods, defined by two milestones in the interaction between Mormons and non-Mormons. Between 1847 and the 1869 completion of the transcontinental railroad, the region was almost exclusively dominated by Mormon settlements. Subsequently, between 1869 and Utah's 1896 statehood, Mormons and non-Mormons actively competed for territory and cultural influence over the region, even though new Mormon towns continued to outnumber new non-Mormon settlements. After 1896, non-Mormon settlements became more numerous, although both Mormon and non-Mormon towns were established in peripheral areas as late as the 1920s. Despite this increasing diversity at the end of the study period, over two thirds of the region's towns are based on Mormon plans. Such numerical comparison, however, obscures the geographical patterns in the region's settlement history. Those patterns, mapped in Figs. 5–7, are discussed in the following section.

Changing historical geographies of Mormon and non-Mormon settlement

The general progress and shifting institutional framework of Mormon settlement expansion has been extensively documented.[38] Nonetheless, a review of the geographical distribution behind that history highlights the changing distributions of Mormon and non-Mormon town plans in the study region. Thus, this section will discuss in detail the areas in which Mormons and non-Mormons founded new towns across each of the three periods analyzed in Table 2.

During the first phase of settlement (1847–1869; Fig. 5), nearly all settlements in the region were established by Mormons, and used recognizably Mormon town plans. In general, these settlements followed the Wasatch Mountains north and south of Salt Lake City. Meinig described this settlement as a series of 'contiguous colonizations,' tracing a 'first tier' along the eastern edge of the Great Basin and a 'second tier' of mountain valleys, along what is today U.S. Highway 89.[39] The Mormon settlements founded during this period show surprising diversity in their forms. Salt Lake City itself incorporated both City of Zion and Nauvoo-plan areas, and it is likely that many settlers became familiar with these two models by passing through the Mormon capital. Mormons built only a few towns in the adjacent Salt Lake Valley, developing instead an extensive system of agricultural lot surveys and semi-dispersed peripheral settlements. Beyond this nascent Mormon core, however, Mormons established dozens of grid-plan towns, using the City of Zion and Nauvoo plans in nearly equal proportion. The Zion-plan towns were established in the northern reaches of the settlement area, as well as at more prominent townsites, such as at Provo, Manti, Fillmore, and St. George. In contrast, Nauvoo-plan towns were disproportionately located in smaller settlements south of Salt Lake.

The initial period of Mormon settlement in Utah appears to have been one of considerable experimentation. Nearly all of the irregular Mormon towns founded in the region were established during this period, though these reflect several different regional processes. In northern Utah, a number of long-block, composite, and diagonal plan towns were founded early in the period (e.g., at Tooele, Henefer, and Payson), though these areas ultimately settled on the Zion and Nauvoo plans. In Utah's southwestern 'Dixie,' by contrast, many small towns (e.g., Santa Clara) faced flash floods and summer droughts, and as a result developed only skeletal town plans. The reasons for the concentrations of Nauvoo- and Zion-plan towns are less clear. The more complex Zion plan may have been thought more appropriate for larger towns at the fertile north of the Wasatch Front. Yet Mormon settlement did not extend further north into Idaho Territory—a decision ascribed both to Mormon desires to avoid the non-Mormon presence along the Oregon Trail corridor, and to (mistaken) Mormon beliefs that more northerly climates would be unsuitable for agriculture.[40] Alternatively, Mormon settlers headed north may have been more influenced by

[37] Conzen, The non-Pennsylvania town (note 12), 194.
[38] Ricks, *Forms and Methods of Early Mormon Settlement* (note 14); Meinig, The Mormon culture region (note 2).
[39] Meinig, The Mormon culture region (note 2), 201–203.
[40] R. Jackson, Mormon perception and settlement, *Annals of the Association of American Geographers* 68 no. 3 (1978) 317–334.

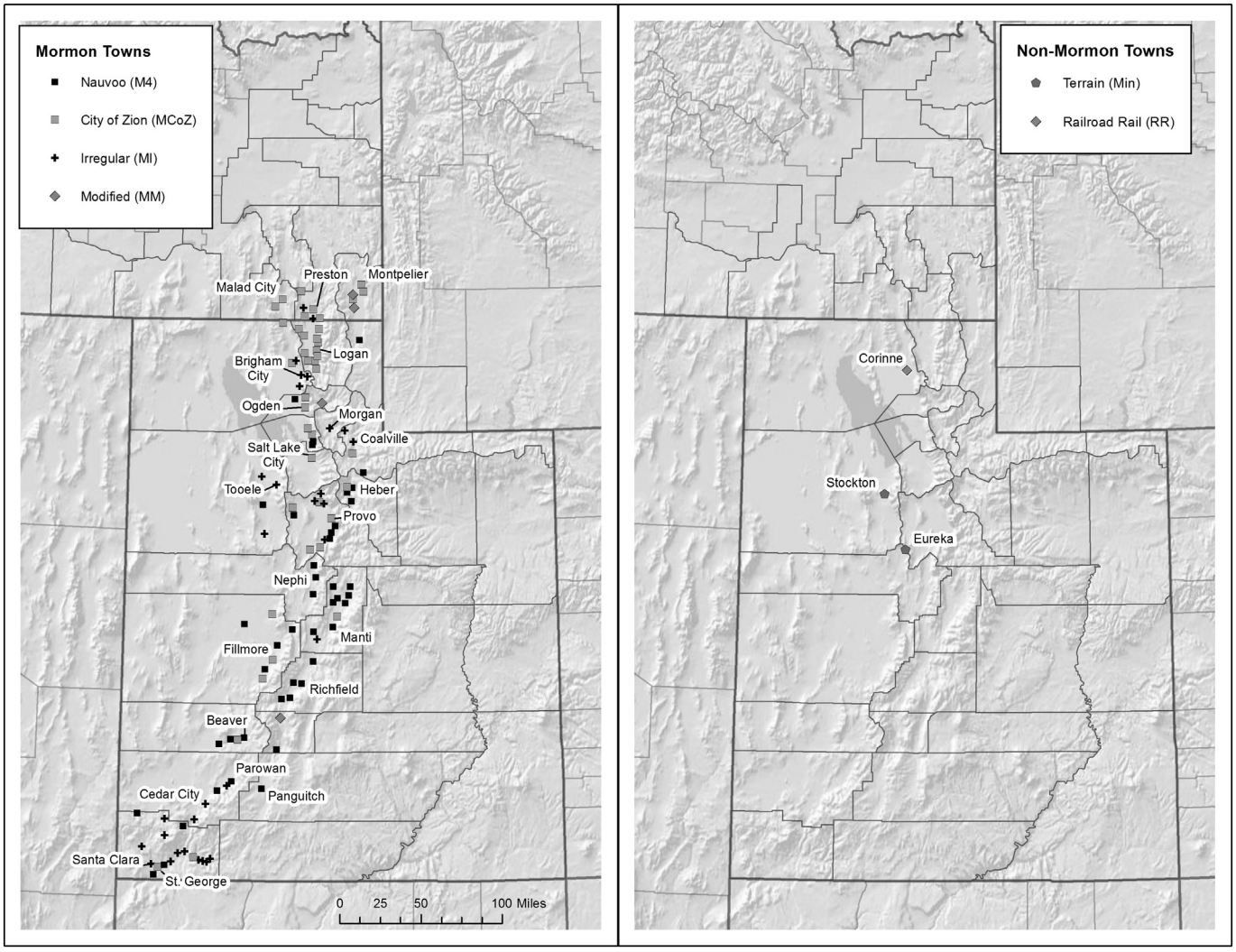

Fig. 5. Mormon and non-Mormon settlements, 1847–1869. Prior to the completion of the transcontinental railroad, all but three settlements in the region were established by Mormons along the valleys of the Wasatch Front. The plats of these towns include diverse Mormon plans that would subsequently fade from use. Cartography by author.

larger cities such as Salt Lake and Ogden, while those called to settle Southern Utah would have passed through many small Nauvoo-plan towns on their southbound journeys.

In contrast to the extensive growth of Mormon settlements during this period, only three non-Mormon settlements were founded in the region before 1870: Stockton (founded 1864) and Eureka (1869) were both established as mining settlements by Californian soldiers based at Fort Douglas outside Salt Lake, while Corinne (founded 1869) was the result of an abortive attempt to locate the junction of the Union Pacific and Central Pacific railroads in a non-Mormon city. These three towns indicate a relatively early non-Mormon presence in the region, but none eclipsed the nearby towns of an expanding Mormon settlement hierarchy.

By the second period (1869–1896; Fig. 6), Mormon settlement expansion had slowed, as new Mormon settlement shifted to peripheral locations, including the southern reaches of Meinig's 'second tier' of settlement, a 'third tier' in Emery, Wayne, and Garfield counties, and expansion into Eastern Idaho. By this point, almost all towns followed either Zion or Nauvoo models, suggesting that initial experimentation had coalesced into established models of Mormon settlement even as top Mormon leaders became less involved in directing new settlement. These towns, however, show the continuing dominance of Nauvoo plans in Southern Utah and Zion plans in the north—likely due to the influence of earlier, established settlements in each region. Eastern Idaho, in contrast, was far from existing Mormon centers. The presence of both settlement plans there suggests the influence of transplants from both Northern and Southern Utah.

Non-Mormon settlements in the region grew dramatically between 1869 and 1896. The locations of these settlements, however, reveal a rapidly changing regional geography. Within Utah, very few of these settlements were agricultural. Instead, these towns mark the locations of mining camps and railroad corridors beyond the reach of earlier Mormon settlement. In contrast, non-Mormon towns in Idaho highlight the active competition between the two groups for this new frontier. Mormons established an early presence stretching from Rigby to St. Anthony, while railroads marked a clear non-Mormon influence further to the south. A large proportion of these towns, moreover, had street systems oriented to the railroads, suggesting that they were platted in conjunction with railroad surveyors.

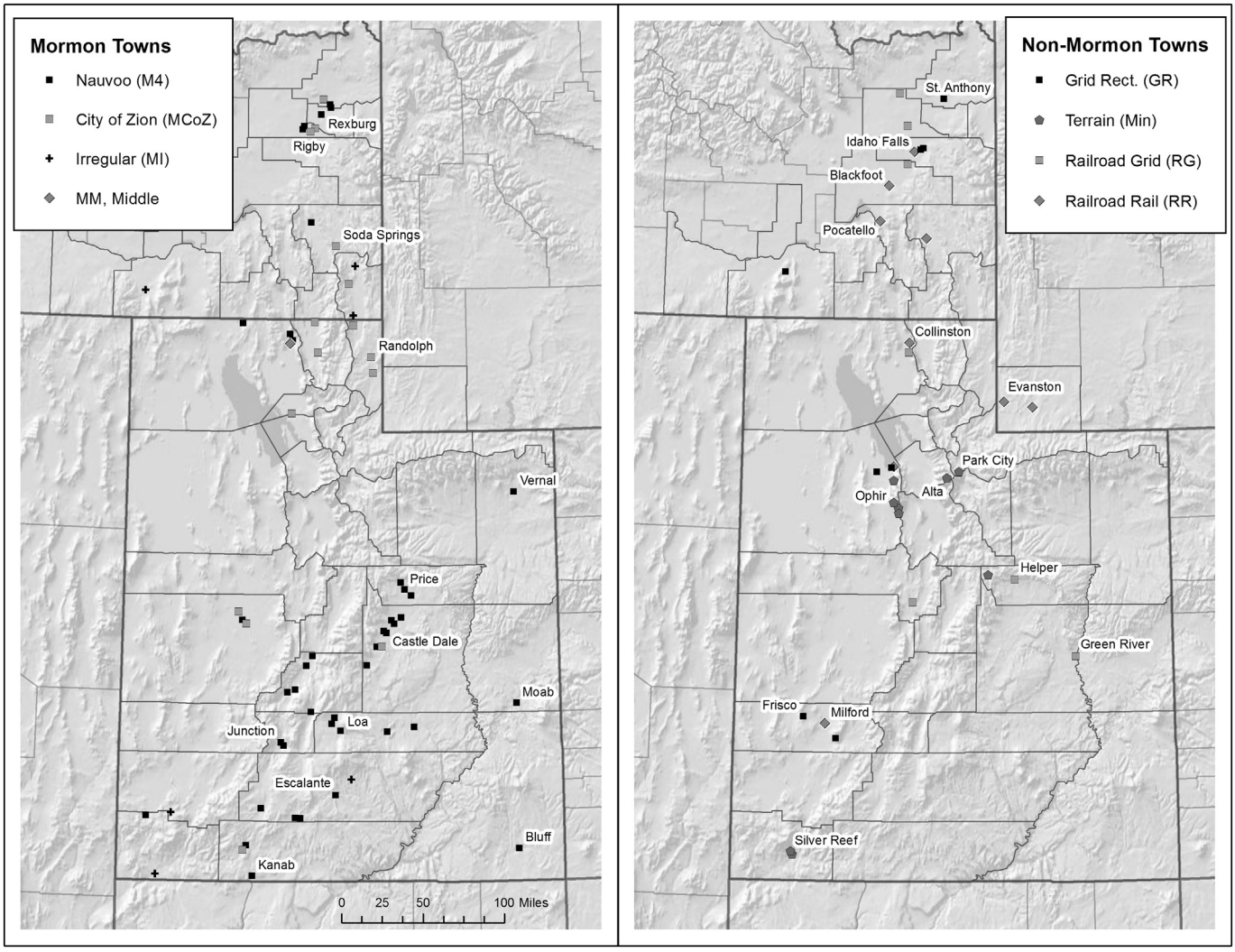

Fig. 6. Mormon and non-Mormon settlements, 1870–1896. The completion of the railroad brought increasing non-Mormon presence to Utah, but did little to challenge established Mormon settlements. Non-Mormons established towns along railroads and in mining districts, while Mormons continued to colonize more peripheral areas of Utah and expanded into southern Idaho. Cartography by author.

Contradicting the oft-asserted notion that town-building in the region had largely ceased by the time of Utah's statehood, more than 150 towns were established in the third period of the study (1896–1930; Fig. 7).[41] Several factors are responsible for this resurgence. First, improved irrigation systems and dry-farming techniques brought cultivation to a number of new areas throughout the region. Many of these areas were close to established settlements, but others—especially in southeastern Utah, south-central Idaho, and western Millard and Box Elder counties—developed market centers to serve new farms. Second, many of these new towns—especially in Idaho—followed the dramatic growth of new railroad lines. Third, the opening of Eastern Utah's Uinta Basin—formerly an Indian reservation—to homesteading in 1905 led to the establishment of many new settlements. Finally, late infill settlement, often only a few blocks in size, platted by individual entrepreneurs as local service centers throughout the region. For the first time, however, the majority of these towns were laid out according to non-Mormon models. Especially in Idaho, many settlements reflected the influence of the railroad. Along with the establishment of grid-rectangular towns through much of the study area, this suggests that by the twentieth century more conventional American town-planning ideas had taken root alongside Mormon models. Indeed, it is extremely likely that many residents of these towns were Mormons.

Although the Mormon Church had almost entirely abandoned its program of centrally-directed colonization during this period, individual entrepreneurs continued to build settlements according to Mormon planning traditions. These towns, like many of their non-Mormon counterparts, were frequently in peripheral locations, yet their use of traditional Mormon town plans—particularly the Nauvoo plan—is clear. More significantly, numerous Modified Mormon towns, including Delta, Tremonton, Fruitland, and Lapoint, were established in this period. While a handful of early Mormon towns had added alleys and differently-sized lots to traditional Mormon square blocks, these elements had largely faded from Mormon town planning by the late nineteenth century. Their

[41] 1900 is taken as the end of Mormon settlement expansion in Rosenvall, Expansion outside the Wasatch Front (note 16); Rosenvall, *Mormon Settlement Patterns* (note 7). An alternative analysis is found in W. Wahlquist, Historic community growth patterns, in: W. Wahlquist (Ed), *Atlas of Utah*, Provo, 1981, 114–115.

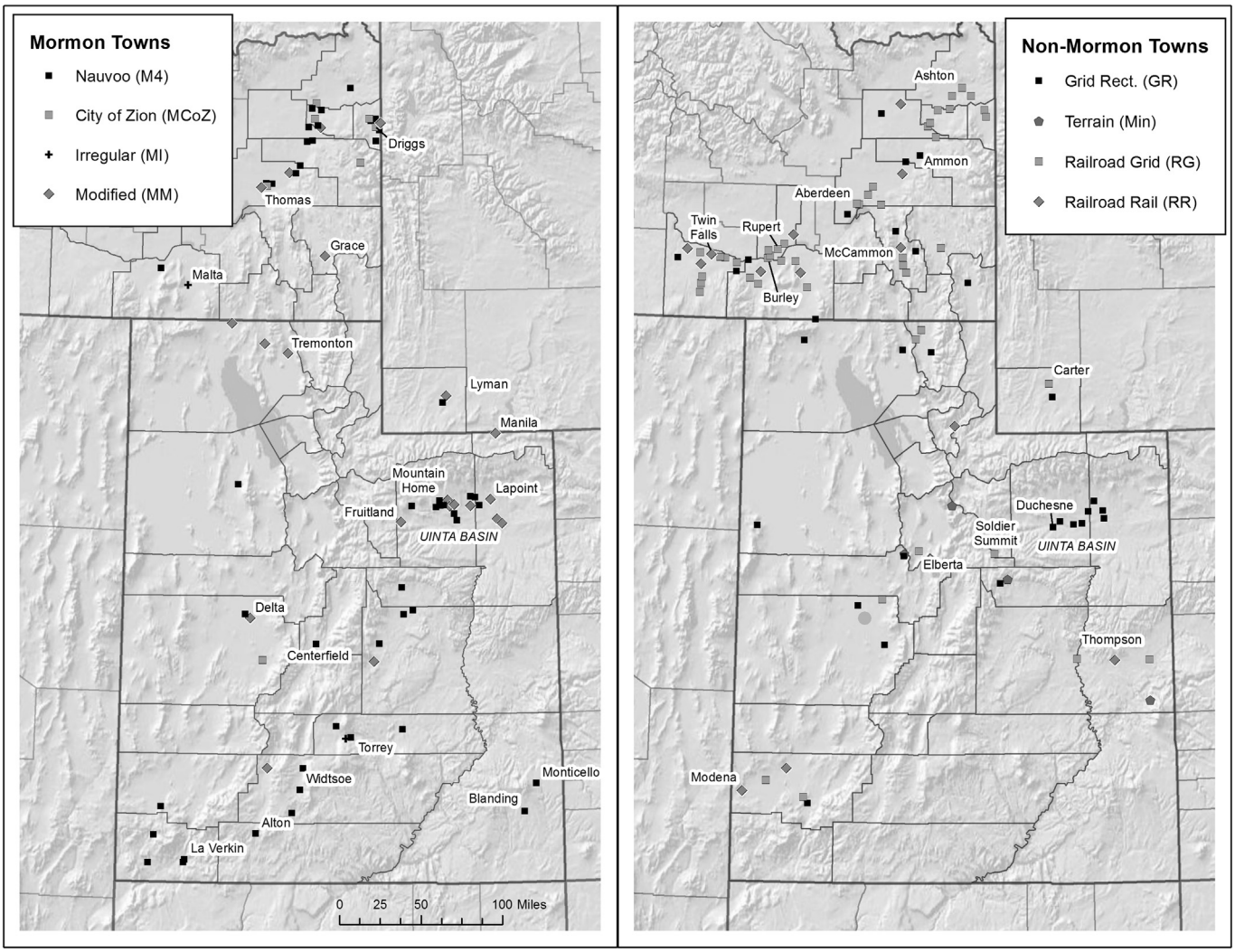

Fig. 7. Mormon and non-Mormon settlements, 1897–1930. During the last period of settlement expansion in the region, numerous Mormon and non-Mormon towns were founded in peripheral areas. Expanding railroads brought many new non-Mormon towns to Idaho; elsewhere, both Mormon and non-Mormon towns filled out the region's agricultural hinterland. Numerous modified-Mormon towns suggest the interplay of Mormon and non-Mormon cultural influences. Cartography by author.

twentieth-century renaissance suggests that these features were the result of more entrepreneurial town-building, blending non-Mormon elements within traditionally Mormon frames. Such a convergence mirrors the clear, if sometimes hesitant, reconciliation between Mormon and American cultural spaces documented by Yorgason.[42]

Conclusions

Mormon settlement clearly dominated the early history of the U.S. Mountain West, but settlement was not uniform and occupied only a small portion of the 'Mormon Culture Region.' Subsequently, as railroads connected Utah to national political and economic structures, Mormons and non-Mormons competed for regional dominance. This competition took different forms in different places. While Mormons continued to colonize peripheral (and, at times, extremely marginal) areas of Utah, non-Mormons were unable to supplant the cities and towns of the Mormon Core. Only in later settled areas, where Mormon and non-Mormon settlement were contemporary, did competing Mormon and non-Mormon town plans coincide and eventually converge. The landscapes of these areas, although marked by the early influences that shaped Meinig's Mormon Domain, are thus more accurately a product of the subsequent transformation that placed the Mormon Culture Region within an American political and cultural frame. Tracing the evolving morphology of new settlements through the region's history illustrates a crucial local-scale aspect of this regional transformation.

Within this history, a few themes deserve further comment. First, it is clear that Mormon settlements were not mere duplicates of Joseph Smith's original plans. Although Smith's City of Zion plat broadly influenced many Mormon settlements, others drew on other early Mormon towns, as well as on elements of the broader American morphological vocabulary. By the late 1860s, early experimentation had consolidated into two distinct prototypes of Mormon town planning, both of which were applied widely throughout the region. Although the precise rationale for the two models remains unclear, it is likely that they reflect both adaptation

[42] Yorgason, *Transformation of the Mormon Culture Region* (note 4).

to local environments—the larger and more fertile valleys of Northern Utah versus the smaller settlements of the south—as well as cumulative influences of local and regional settlement hierarchies. In any case, the two models demonstrate considerable local variation within an ostensibly homogeneous cultural region. The variations found in early and late Mormon settlements offer tantalizing suggestions as to how this Mormon planning tradition, as well as broader Mormon settlement processes, emerged, standardized, and later began to converge with national norms. The early irregular towns suggest several influences on Mormon planning that were later discarded in favor of more uniform town plans. Some of these, such as the diagonal towns founded in mountain valleys and the skeletal settlements of southwest Utah, are clearly adaptations to the terrain. Others reveal more complex dimensions of Mormon social and economic organization, such as the addition of Nauvoo-plan blocks to Salt Lake City's Avenues District, in order to provide housing for non-farmers. But the reasons for other variations, such as the long-blocks of Brigham City and Tooele, remain obscure. Likewise, even though the late emergence of the Modified Mormon plan points to a late convergence of Mormon and non-Mormon urban forms, the plats for these towns reveal few details about the people who founded towns. The yellowing plats in recorders' offices simultaneously provide a crucial documentary anchor for the shaping of the Mountain West's successive settlements, and invite further research connecting townscape morphologies to the broader transformation of a cultural region.

The non-Mormon settlements in this study emphasize the links between local landscapes and broader regional processes. Non-Mormon town plans, clearly distinct from Mormon models, map the containment of Mormon influence in the Mountain West. Yet the limited growth of non-Mormon towns in much of Utah reiterates Zelinsky's 'Doctrine of First Effective Settlement.'[43] Only rarely did non-Mormon mining and railroad towns become more than stunted extremities of the Mormon heartland—a fact dramatically illustrated by the failure of the proposed 'Gentile Capital' at Corinne. Even so, non-Mormons were clearly present in the territory's economic and political structures.[44] Much of this influence, therefore, took place within the physical spaces of earlier Mormon settlements. Salt Lake City, Ogden, and other cities retained their Mormon plans, even as their urban fabrics and functions were reshaped by non-Mormon settlement. Instead of being displaced by non-Mormon settlements, these cities instead became points of articulation, linking the existing and expanding Mormon settlement system into larger-scale structures. Nonetheless, it is the scattered mining camps and railroad junctions that most dramatically reveal non-Mormon presence in an otherwise-Mormon landscape.

Indeed, much of the perceived homogeneity of the landscapes of the Mormon Culture Region is absent from the historical evidence of town plats. Although Mormon meetinghouses, temples and tabernacles, reserved 'public blocks,' street naming and numbering conventions, and other elements unify the regional character of Mormon townscapes, these elements cannot be firmly traced to the layouts of Mormon towns, as originally conceived and recorded. Without doubt, these elements reflect the direct and indirect influences of Mormon community life on the spaces of Mormon settlements, but questions remain as to when and how these features were adopted in individual towns. Conversely, many of the more subtle variations between the plans of Mormon towns and cities have faded over many decades of urban development and redevelopment. Indeed, many of the Modified Mormon settlements established after 1900—the clearest evidence of converging Mormon and non-Mormon influences—have long been abandoned, leaving little physical evidence of the cultural transformation of the Mormon domain. Thus, while a compilation of original town plans from the Mormon Culture Region highlights important regional-scale patterns and trends, it only begins to illustrate the historical, geographical, and cultural transformations that took place as Mormons and non-Mormons encountered one another in the region's cities and towns. Drawing on the perspective of town-plan analysis developed in this study, further research might probe the platting process at local scale, identifying the people who laid out individual communities and their inspirations and influences. Detailed historical evidence of this process is sparse, but in-depth studies concerning the early irregular and late modified Mormon towns could prove particularly revealing.

Yet neither Mormon nor non-Mormon towns were solely products of their original plans. As towns' populations and functions changed over time, their built environments were reshaped. Initial studies of three towns in the region have illustrated the influence of railroad connections, and the emergence of distinct functional differentiations within homogeneous town plan grids.[45] Clearly, more work remains to be done in evaluating the contemporary landscapes and townscapes of the U.S. Mountain West as illustrations of not only Mormon homogeneity and persistence, but of the cultural transformation of the Mormon Culture Region. Yet, despite this transformation, the different plans of Mormon and non-Mormon settlements are clearly evident in those towns today. The region's distinctive and varying townscapes—seen through both the material landscape and the archival record—bear witness to not only recurring Mormon influence, but also to decades of encounter, adaptation, and regional transformation.

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[43] Zelinsky, *The Cultural Geography of the United States* (note 8).
[44] Smith, *The WASP in the Beehive* (note 4).
[45] Smith, *The WASP in the Beehive* (note 4).